TITLE OF INVENTION: ADAPTIVE CACHING FOR A DISTRIBUTED FILE SHARING SYSTEM

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

DATE MAILED: 12/09/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

86942	2 7590 12/09/2009			EXAMINER		
Meyertons, Hood, Kiylin, Kowert, Goetzel/Symantec				BAYARD, DJENANE M		
P.O. Box 398				ART UNIT	PAPER NUMBER	
Austin, TX	78767-0398			2444	•	

 APPEACATION NO.
 FILNG DATE
 HEST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONTREMATION NO.

 10/750,426
 12/31/2003
 Dilip Madhusudan Ranade
 5760-18800
 1784

 APPLN TYPE
 SMALLENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$0
 \$0
 \$1510
 0309/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

maintenance fee notifica	tions.						correspondence address as rate "FEE ADDRESS" for	
CURRENT CORRESPOND	Fee pap	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying perse. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.						
86942		V2009		Ces	tificat	of Mailing or Trans	mission	
Meyertons, Ho P.O. Box 398 Austin, TX 7876		rt, Goetzel/Symant	CC I he Stat add tran	Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (371) 273-2885, on the date indicated below.				
							(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.	
10/750,426	12/31/2003		Dilip Madhusudan Ranade	e :		5760-18800	1784	
TITLE OF INVENTION	: ADAPTIVE CACHING	G FOR A DISTRIBUTE	D FILE SHARING SYSTE	M				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$0	\$0		\$1510	03/09/2010	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS					
BAYARD, D		2444	709-217000					
1. Change of corresponde CFR 1.363).	ence address or indicatio	n of "Fee Address" (37		rinting on the patent front page, list				
	ondence address (or Cha B/122) attached.		(I) the names of up to 3 registered patent attorneys or agents OR, alternatively,					
			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to					
"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2 registered patent attorneys or agents. If no name is 3					
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or ty	ne)				
PLEASE NOTE: Uni	less an assignee is ident	ified below, no assignee	data will appear on the p	atent. If an assign	ee is i	dentified below, the de	cument has been filed for	
(A) NAME OF ASSI		netion of this form is NO	(B) RESIDENCE: (CITY					
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Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual UC	orporat	ion or other private gro	up entity 🖵 Government	
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Plea	se first reapply a	ny pre	lously paid issue fee	hown above)	
Issue Fee	vo small entity discount p	it#	A check is enclosed.	4 F PTO 2020		and a discount		
Advance Order -		☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any						
			overpayment, to Depo	sit Account Numb	ěř	(enclose a	extra copy of this form).	
5. Change in Entity Sta	tus (from status indicated s SMALL ENTITY state		☐ b. Applicant is no lon	ger claiming SMA	LL EN	FITY status Sec 37 CF	R 1 27(o)(2)	
							e assignee or other party in	
interest as snown by the	records of the United Sta	nes ratent and Trademan	Onice.					
Authorized Signature				Date				
Typed or printed name			Registration No.					
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450. Alexandria V	tation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but virginia 22313-1450. DC	CFR 1.311. The information U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the DNOT SEND FEES OR	on is required to obtain or a 1.14. This collection is est of depending upon the indivi- echief Information Office COMPLETED FORMS TO	etain a benefit by imated to take 12 idual case. Any co er, U.S. Patent and O THIS ADDRES:	he pub minute ommen Trader	lic which is to file (and is to complete, includin its on the amount of tir nark Office, U.S. Deps D TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,	
Alexandria, Virginia 223	13-1450.	OK				Commissioner		

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10/750,426 12/31/2003		Dilip Madhusudan Ranade	5760-18800	1784
86942 75	90 12/09/2009	EXAMINER		
Meyertons, Hood	, Kivlin, Kowert, Go	BAYARD, DJENANE M		
P.O. Box 398		ART UNIT	PAPER NUMBER	
Austin, TX 78767-	0398	2444		
		DATE MAILED: 12/00/2009		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 899 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 899 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/750,426 RANADE ET AL. Notice of Allowability Examiner Art Unit DJENANE M BAYARD 2444 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 10/27/09. The allowed claim(s) is/are 31,36,37,42,43 and 48-57. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

ALLOWANCE

- The amendment filed on 10/27/09 has been placed of record in the file.
- The rejection of clams 31, 36-37, 42-43, 48-57 under 35 U.S.C. 103 is withdrawn in view of the amendment
- Claims 31, 36-37, 42-43, 48-57 allowed.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: The independent claims distinguish themselves over the prior art by storing respective history information for each respective data portion of the plurality of data portions of the replica, where the respective history information for each respective data portion of the replica indicates previous accesses to the respective data portion of the replica and when a write request is received specifying data to be written to a particular one of the data portions, the respective history information for that particular data portion is analyzed in order to determine whether the particular data portion was accessed more than the threshold number of times within the particular time period in combination with all the limitation in the independent claims.

Although prior art exist that allow for the history information of replica, these prior art do not support history information for each respective data portion of the plurality of data portions of the replica.

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Art Unit: 2444

Furthermore, the prior art gives no indication that it would have been obvious to one with ordinary skill in the art at the time of the applicant's invention to update a replica cache in this fashion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DJENANE M. BAYARD whose telephone number is (571)272-3878. The examiner can normally be reached on Monday-Friday 5:30 AM- 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2444

/Djenane M Bayard/ Examiner, Art Unit 2444